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TECHNICAL REPORT 0-80-4

A PARAMETRIC MODEL FOR THE EFFECT OF WHITE
PHOSPHORUS SMOKE ON TARGET DETECTION II;
MULTIBAND LINE-OF-SIGHT BLOCKAGE MODEL

Bruce W. Fowler
Advanced Systems Concepts Office

6 June 1980



U.S. ARMY MISSILE COMMAND

Redstone Arsenal, Alabama 35809

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Most obscuration models are too large for use in simulating the effects of obscuration on combat in conflict simulations. This report documents the complete set of parameters for white phosphorus US Army inventory munitions for the line-of-sight blockage model (LOSB). Selected comparisons between the LOSB model and a conventional smoke model are made. The development of the LOSB model is briefly described.		

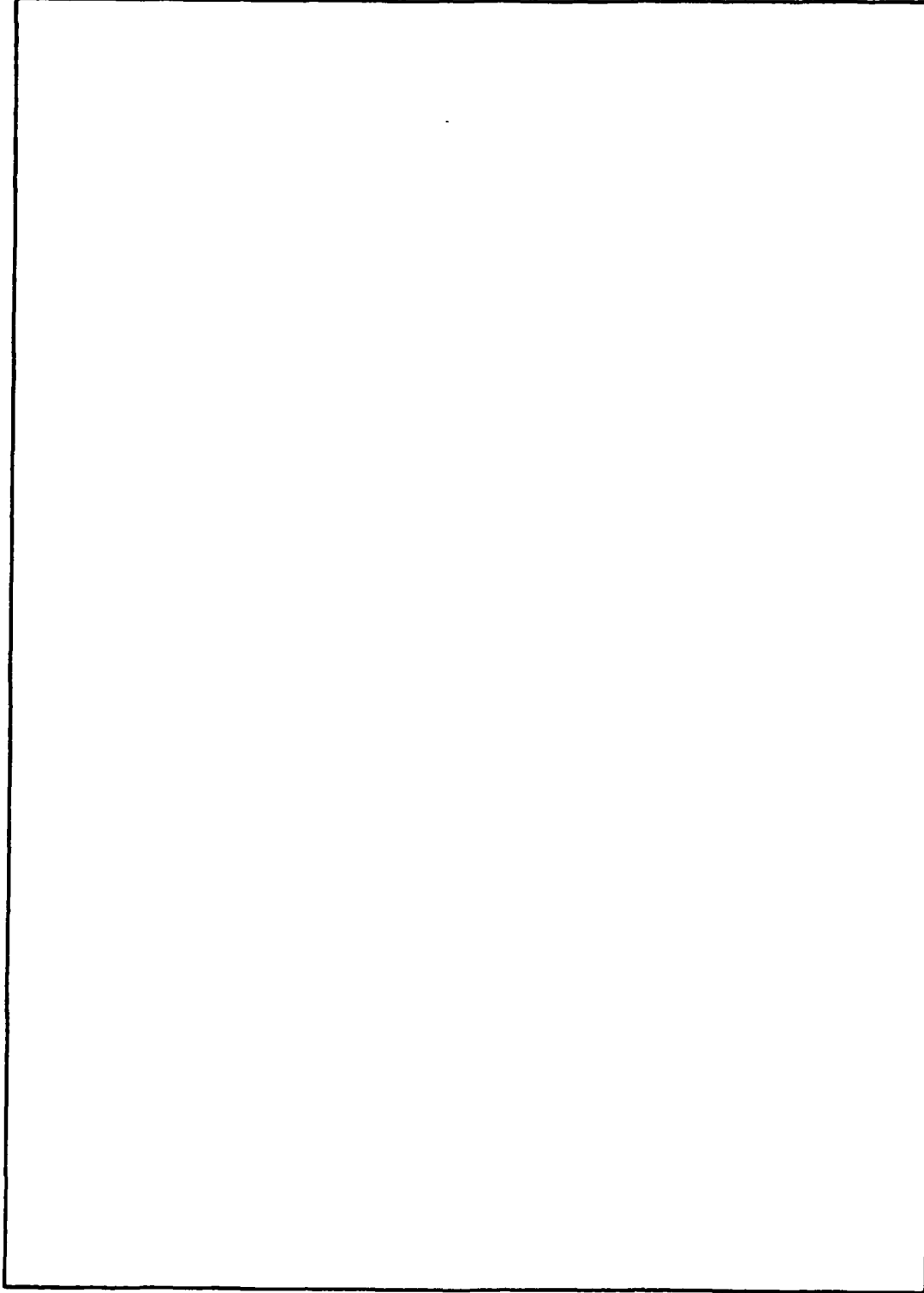
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I. INTRODUCTION

This report is the second in a series describing the results of an investigation conducted to quantify the effects of white phosphorus (WP) smoke on the acquisition of targets by various sensors in a parametric manner. The historical background and technical foundation of the investigation were described in the first report of this series.¹

The first report described the development of a parametric line-of-sight blockage model based on parametrization of the inputs of the Smoke Effectiveness Manual Model (SEMM) and the linear regression of the output of that model. That report documented the parametric model for the visual portion of the spectrum. This report documents the parametric model for four portions of the spectrum — the visual (0.4 to 0.7-micron wavelength — repeated from portions of Ref. 1); the near infrared (IR) (0.9 to 1.2 microns — called antitank guided missile (ATGM) band in SEMM); the mid IR (3 to 5 microns); and the far IR (8 to 14 microns — called night sight in SEMM).

This investigation is part of an ongoing examination of the effect of battlefield obscuration on the performance of missile (and certain selected nonmissile) weapons systems as part of the Concepts Analysis and Validation work area of the A214 Missile Technology Program. The results of this examination will be used in the formulation, analysis, and evaluation of present and conceptual missile weapon systems.

II. BRIEF MODEL DESCRIPTION

The development of the parametric line-of-sight blockage model from the SEMM has been described previously.¹ The parametric model consists of two curve fits of the half-width ($w_{1/2}$) and height (h) of a WP smoke cloud as a function of time relative to the centroid of the cloud for various geometries, meteorological conditions, wind speeds, munitions, and spectral regions. These latter five variables were parametrized in developing the model. Specifically, the spectral regions used were the visual (0.4 to 0.7-micron wavelength); the near IR (0.9 to 1.2 microns — called ATGM in SEMM); the mid IR (3 to 5 microns); and the far IR (8 to 14 microns — called thermal sight in SEMM). The munitions considered were the 155-mm, 105-mm, 4.2-in., and 81-mm WP rounds in the US Army inventory. The meteorological conditions (and wind speeds) considered were lapse (5 knots), neutral (5, 10, and 15 knots) and inversion (5 knots). The geometries considered were head-tail wind, crossing wind, and quartering wind representing lines of sight along the wind axis, perpendicular to the wind axis, and at an angle of 45° to the wind axis, respectively. The cloud was assumed to lie completely between observer and target so that line-of-sight concentration-pathlength integrations could be performed analytically.

The critical obscuration in each spectral region was expressed in terms of a transmission which was converted into a critical concentration-pathlength. These transmissions and concentration-pathlengths are given in tabular form

¹ Fowler, B. W. and Thomas B. Owens, A Parametric Model for the Effect of White Phosphorus Smoke on Target Detection I: Model Development, US Army Missile Command, TR 0-80-2, 18 Oct 1979, Unclassified.

below and, except for the mid IR spectral region, are identical to those used in SEMM.² The mid IR spectral region critical transmission was assumed to be identical to that for the far IR.

Critical Transmission and Concentration-Pathlengths

SPECTRAL REGION	TRANSMISSION (%)	CONCENTRATION- PATHLENGTHS (g/m ²)
Visual	10	0.6936
Near IR	1	1.725
Mid IR	5	16.643
Far IR	5	10.699

The SEMM model was exercised for each combination of the parametric conditions specified above to determine the half-width and height of the cloud corresponding to the critical concentration-pathlength as a function of time. All calculations were performed relative to the centroid of the cloud. Specifically, the half-width is the distance from the centroid of the cloud perpendicular to the line-of-sight direction, in the ground plane, where the concentration-pathlength is equal to the critical concentration-pathlength. The height of the cloud is the distance above the cloud centroid, along the line-of-sight direction where the concentration-pathlength is equal to the critical concentration-pathlength. The symmetry of the SEMM model requires that the contours of critical concentration-pathlength be ellipsi with semiaxes equal to the half-width and height. Examples of these two curves are shown in Figure 1. Because the obscurant in the cloud is constantly diffusing, at some time after round detonation (cloud formation) the concentration-pathlength through the cloud centroid becomes less than the critical concentration-pathlength. This time is the effective lifetime of the cloud, and is dependent on the parameters.

The calculated values of the half-width and height were then fitted to simple mathematical functions using linear regression. These functions are:

$$w_{1/2} = a(0) + a(1) t + a(2) t^2 + a(3) t^3 \quad (1)$$

and

$$h = Z_0 + A t^a \exp (b t + c t^2). \quad (2)$$

² Marchetti, R. M., *A Transport and Diffusion Model for Smoke Munitions*, USAMSAA 7R 272, Aug 79, (Unclassified).

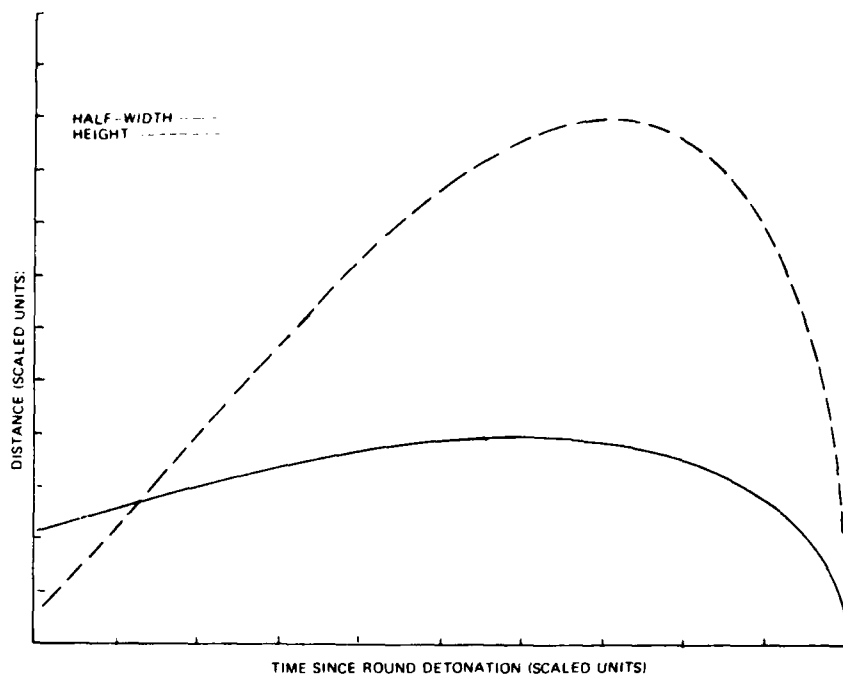


Figure 1. SEMM calculated cloud half-width and height for 4.2-in. WP round, lapse meteorology, 5-knot head wind, visual band.

where t is the time in seconds since round detonation (cloud formation). Both $w_{1/2}$ and h have units of meters. The coefficients $a(0)$ through $a(3)$ for $w_{1/2}$ and A , a , b , and c for h are tabulated in the next section. The use of the coefficients in the parametric model has been described previously (Ref. 1).

III. COEFFICIENTS OF THE PARAMETRIC MODEL

This section contains the coefficients for Equations 1 and 2 for use in the parametric model. These coefficients are given in Tables 1 through 60. The tables are arranged by spectral region, meteorology, and wind speed and direction. Specifically, Tables 1 through 15 are for the visual spectral band, Tables 16 through 30 are for the ATGM or near IR spectral band, Tables 31 through 45 are for the mid IR spectral band, and Tables 46 through 60 are for the far IR spectral region. Within each set of 15 tables, the first three are for lapse conditions with 5-knot winds of head, quartering, and crossing direction, respectively. The next nine tables are in subsets of three tables for each wind speed of 5, 10, or 15 knots for the neutral conditions of meteorology. The last three tables are for the inversion meteorological conditions. Each table contains the coefficients for the four rounds, and the following information for each round is presented:

Round type

Meteorological condition

Wind direction and speed

Spectral band

a(0) Zo

a(1) A

a(2) a

a(3) b

c

Sw Sh

The entries Sw and Sh are the standard deviations of error of fit (in meters) for the half-width and height functions, Equations 1 and 2, respectively.

While the user may examine the values of Sw and Sh to obtain some idea of the accuracy of the fits, a comment based on observation and plotting may be of use. The $w_{1/2}$ curves are, in general, more accurate than the h curves. The accuracy of the $w_{1/2}$ curves does not vary excessively with increasing wavelength, although the accuracy of the h curves for times less than about 70% of the effective lifetime of the cloud increases with increasing wavelengths, while the accuracy of the same curves for times more than about 70% of the effective lifetime of the cloud decreases with increasing wavelength. Because of the increasingly short effective lifetimes of the cloud with increasing wavelength, this trend should not be crucial in most uses of the parametric model. A representative plot of the calculated and fitted half-widths and heights are shown in Figure 2.

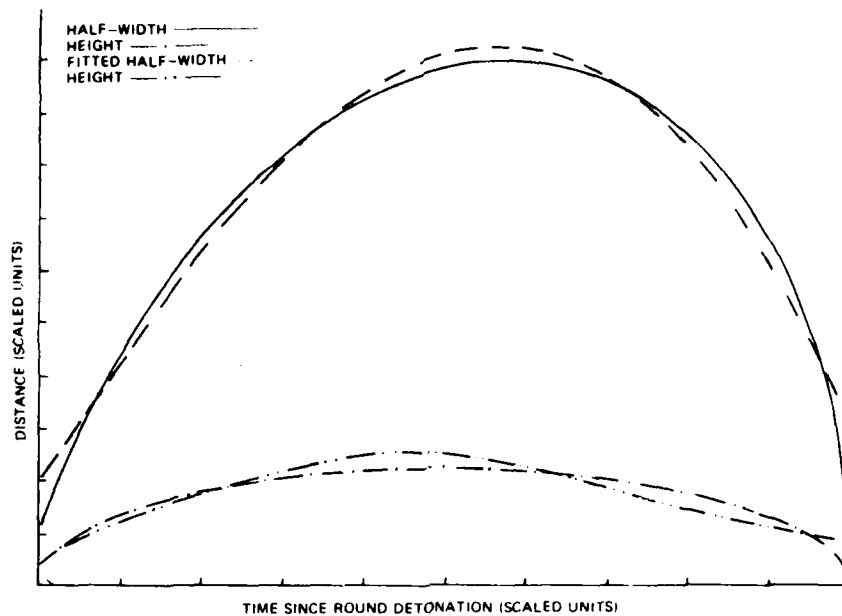


Figure 2. SEMM calculated cloud half-width and height, and fitted half-width and height for 4.2-in. WP round, inversion meteorology, 5-knot cross wind, visual band.

TABLE 1. COEFFICIENTS FOR LAPSE METEOROLOGY, 5-KNOT HEAD WIND,
VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.4625E+01	Zo	4.6251E+00
	a(1)	1.0611E-01	A	9.3455E-01
	a(2)	4.3923E-03	a	8.3071E-01
	a(3)	-6.2032E-05	b	3.1393E-02
			c	-3.6427E-04
	Sw	5.6448E-01	Sh	3.4642E+00
105-mm Round	a(0)	9.1680E+00	Zo	2.9602E+00
	a(1)	6.8808E-02	A	7.2662E-01
	a(2)	5.4486E-03	a	8.0104E-01
	a(3)	-1.3771E-04	b	5.1546E-02
			c	-1.0102E-03
	Sw	2.2722E-01	Sh	1.3574E+00
4.2-in. Round	a(0)	1.8145E+01	Zo	5.7079E+00
	a(1)	1.2674E-01	A	1.0209E+00
	a(2)	3.9195E-03	a	8.5724E-01
	a(3)	-4.2885E-05	b	2.4025E-02
			c	-2.2334E-04
	Sw	8.2856E-01	Sh	5.1814E+00
81-mm Round	a(0)	7.0739E+00	Zo	2.2781E+00
	a(1)	4.8432E-02	A	6.1530E-01
	a(2)	6.2156E-03	a	8.0376E-01
	a(3)	-2.1673E-04	b	6.4648E-02
			c	-1.7394E-03
	Sw	1.3802E-01	Sh	8.1371E-01

TABLE 2. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT QUARTERING WIND, VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.4961E+01	Zo	4.6251E+00
	a(1)	2.4921E-01	A	9.4238E-01
	a(2)	2.7836E-03	a	7.8905E-01
	a(3)	-6.6315E-05	b	3.7322E-02
			c	-4.4407E-04
	Sw	8.2594E-01	Sh	3.9311E+00
105-mm Round	a(0)	9.3711E+00	Zo	2.9602E+00
	a(1)	2.3009E-01	A	7.0822E-01
	a(2)	3.9028E-03	a	7.3414E-01
	a(3)	-1.9088E-04	b	6.9851E-02
			c	-1.4650E-03
	Sw	3.7492E-01	Sh	1.5436E+00
4.2-in. Round	a(0)	1.8371E+01	Zo	5.7079E+00
	a(1)	2.8305E-01	A	1.0201E+00
	a(2)	1.7917E-03	a	8.4494E-01
	a(3)	-3.7586E-05	b	2.5096E-02
			c	-2.3911E-04
	Sw	8.9653E-01	Sh	5.0400E+00
81-mm Round	a(0)	7.1922E+00	Zo	2.2781E+00
	a(1)	2.3095E-01	A	5.8250E-01
	a(2)	3.8591E-03	a	7.5405E-01
	a(3)	-3.3009E-04	b	8.6131E-02
			c	-2.6019E-03
	Sw	2.1267E-01	Sh	8.3122E-01

TABLE 3. COEFFICIENTS FOR LAPSE METEOROLOGY, 5-KNOT CROSS WIND,
VISUAL BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.5194E+01	Zo	4.6251E+00
	a(1)	3.8606E-01	A	9.3228E-01
	a(2)	8.5751E-04	a	7.7782E-01
	a(3)	-6.6738E-05	b	3.9541E-02
			c	-4.9125E-04
	Sw	8.9702E-01	Sh	3.7010E+00
105-mm Round	a(0)	9.4667E+00	Zo	2.9602E+00
	a(1)	3.9744E-01	A	6.8387E-01
	a(2)	3.2418E-04	a	7.4338E-01
	a(3)	-2.1077E-04	b	7.1154E-02
			c	-1.6395E-03
	Sw	3.6946E-01	Sh	1.2646E+00
4.2-in. Round	a(0)	1.8631E+01	Zo	5.7079E+00
	a(1)	4.1546E-01	A	1.0160E+00
	a(2)	-3.1275E-05	a	8.3640E-01
	a(3)	-3.3368E-05	b	2.6011E-02
			c	-2.5439E-04
	Sw	9.4520E-01	Sh	4.8305E+00
81-mm Round	a(0)	7.3413E+00	Zo	2.2781E+00
	a(1)	3.7295E-01	A	5.5304E-01
	a(2)	2.0188E-03	a	7.0706E-01
	a(3)	-4.5401E-04	b	1.0849E-01
			c	-3.4946E-03
	Sw	2.9388E-01	Sh	8.6274E-01

TABLE 4. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 5-KNOT HEAD WIND,
VISUAL BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.5063E+01	Zo	4.6251E+00
	a(1)	9.2168E-02	A	9.9414E-01
	a(2)	-1.3377E-05	a	6.2343E-01
	a(3)	-4.5973E-07	b	5.2550E-03
			c	-1.6863E-05
	Sw	9.0855E-01	Sh	3.1743E+00
105-mm Round	a(0)	9.2950E+00	Zo	2.9602E+00
	a(1)	8.0797E-02	A	8.4223E-01
	a(2)	6.6703E-05	a	5.6659E-01
	a(3)	-2.8578E-06	b	1.4817E-02
			c	-9.8507E-05
	Sw	3.8347E-01	Sh	1.4552E+00
4.2-in. Round	a(0)	1.8824E+01	Zo	5.7079E+00
	a(1)	9.7040E-02	A	1.0333E+00
	a(2)	-2.7766E-05	a	6.5203E-01
	a(3)	-1.8939E-07	b	3.1155E-03
			c	-7.3299E-06
	Sw	1.2226E+00	Sh	4.3088E+00
81-mm Round	a(0)	7.1809E+00	Zo	2.2781E+00
	a(1)	6.5159E-02	A	7.5519E-01
	a(2)	3.5536E-04	a	5.0268E-01
	a(3)	-8.7261E-06	b	2.9455E-02
			c	-2.8614E-04
	Sw	3.0689E-01	Sh	1.1137E+00

TABLE 5. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 5-KNOT QUARTERING WIND,
VISUAL BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.6021E+01	Zo	4.6251E+00
	a(1)	3.0876E-01	A	9.3524E-01
	a(2)	-1.9264E-04	a	5.6199E-01
	a(3)	-3.5071E-06	b	1.1890E-02
			c	-5.8621E-05
	Sw	1.4217E+00	Sh	2.1593E+00
105-mm Round	a(0)	9.8048E+00	Zo	2.9602E+00
	a(1)	2.7837E-01	A	8.2010E-01
	a(2)	1.1494E-04	a	3.6905E-01
	a(3)	-2.1077E-05	b	4.6263E-02
			c	-4.3081E-04
	Sw	7.2268E-01	Sh	1.4477E+00
4.21-in. Round	a(0)	2.0239E+01	Zo	5.7079E+00
	a(1)	3.1656E-01	A	9.8882E-01
	a(2)	-1.8414E-04	a	5.9922E-01
	a(3)	-1.5610E-06	b	7.1478E-03
			c	-2.5810E-05
	Sw	2.0065E+00	Sh	2.9011E+00
81-mm Round	a(0)	7.3663E+00	Zo	2.2781E+00
	a(1)	2.8065E-01	A	6.1208E-01
	a(2)	-2.2138E-04	a	4.8178E-01
	a(3)	-4.7282E-05	b	5.2062E-02
			c	-8.2150E-04
	Sw	3.3987E-01	Sh	6.7065E-01

TABLE 6. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 5-KNOT CROSS WIND,
VISUAL BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.6922E+01	Zo	4.6251E+00
	a(1)	4.5799E-01	A	9.1191E-01
	a(2)	-5.4740E-04	a	5.2478E-01
	a(3)	-6.2868E-06	b	1.6298E-02
			c	-9.1362E-05
	Sw	1.6604E+00	Sh	1.9411E+00
105-mm Round	a(0)	1.0122E+01	Zo	2.9602E+00
	a(1)	4.4317E-01	A	7.4697E-01
	a(2)	-9.4058E-04	a	3.4646E-01
	a(3)	-3.4087E-05	b	5.7424E-02
			c	-6.3082E-04
	Sw	7.1639E-01	Sh	1.1942E+00
4.2-in. Round	a(0)	2.1460E+01	Zo	5.7079E+00
	a(1)	4.6697E-01	A	9.6033E-01
	a(2)	-4.6468E-04	a	5.7677E-01
	a(3)	-2.7629E-06	b	9.3718E-03
			c	-3.8841E-05
	Sw	2.2699E+00	Sh	2.4901E+00
81-mm Round	a(0)	7.7240E+00	Zo	2.2781E+00
	a(1)	4.1405E-01	A	5.6181E-01
	a(2)	-4.6169E-04	a	4.3504E-01
	a(3)	-9.5085E-05	b	7.1152E-02
			c	-1.2923E-03
	Sw	5.2649E-01	Sh	6.6791E-01

TABLE 7. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 10-KNOT HEAD WIND,
VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.5063E+01	Zo	4.6251E+00
	a(1)	1.8434E-01	A	1.2302E+00
	a(2)	-5.3508E-05	a	7.1100E-01
	a(3)	-3.6779E-06	b	8.0829E-03
			c	-6.1472E-05
	Sw	9.0855E-01	Sh	3.2469E+00
105-mm Round	a(0)	9.2404E+00	Zo	2.9602E+00
	a(1)	1.6991E-01	A	1.0581E+00
	a(2)	2.0671E-05	a	6.7998E-01
	a(3)	-2.0986E-05	b	2.0678E-02
			c	-3.3266E-04
	Sw	3.2300E-01	Sh	1.3091E+00
4.2-in. Round	a(0)	1.8758E+01	Zo	5.7079E+00
	a(1)	1.9709E-01	A	1.2476E+00
	a(2)	-1.3765E-04	a	7.4692E-01
	a(3)	-1.4547E-06	b	4.2499E-03
			c	-2.5681E-05
	Sw	1.1389E+00	Sh	4.2438E+00
81-mm Round	a(0)	7.1809E+00	Zo	2.2781E+00
	a(1)	1.3032E-01	A	9.6714E-01
	a(2)	1.4214E-03	a	5.8136E-01
	a(3)	-6.9809E-05	b	5.1359E-02
			c	-1.0786E-03
	Sw	3.0689E-01	Sh	1.1260E+00

TABLE 8. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 10-KNOT QUARTERING WIND, VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.6021E+01	Zo	4.6251E+00
	a(1)	6.1753E-01	A	1.1760E+00
	a(2)	-7.7056E-04	a	6.4179E-01
	a(3)	-2.8057E-05	b	2.0110E-02
			c	-2.1927E-04
	Sw	1.4217E+00	Sh	2.1907E+00
105-mm Round	a(0)	9.8048E+00	Zo	2.9602E+00
	a(1)	5.5673E-01	A	9.8742E-01
	a(2)	4.5977E-04	a	4.2498E-01
	a(3)	-1.6862E-04	b	8.6958E-02
			c	-1.6725E-03
	Sw	7.2268E-01	Sh	1.4529E+00
4.2-in. Round	a(0)	2.0070E+01	Zo	5.7079E+00
	a(1)	6.4640E-01	A	1.2090E+00
	a(2)	-9.3846E-04	a	6.9834E-01
	a(3)	-1.1697E-05	b	1.0446E-02
			c	-9.0164E-05
	Sw	1.8034E+00	Sh	2.7377E+00
81-mm Round	a(0)	7.2723E+00	Zo	2.2781E+00
	a(1)	5.9862E-01	A	8.0876E-01
	a(2)	-3.7641E-03	a	6.6754E-01
	a(3)	-3.2110E-04	b	5.9430E-02
			c	-2.4075E-03
	Sw	2.5529E-01	Sh	5.0670E-01

TABLE 9. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 10-KNOT CROSS WIND,
VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.6927E+01	Zo	4.6251E+00
	a(1)	9.1598E-01	A	1.1424E+00
	a(2)	-2.1896E-03	a	5.9953E-01
	a(3)	-5.0294E-05	b	2.8544E-02
			c	-3.4553E-04
	Sw	1.6604E+00	Sh	1.9627E+00
105-mm Round	a(0)	1.0122E+01	Zo	2.9602E+00
	a(1)	8.8633E-01	A	8.9175E-01
	a(2)	-3.7623E-03	a	4.0700E-01
	a(3)	-2.7269E-04	b	1.0749E-01
			c	-2.4424E-03
	Sw	7.1639E-01	Sh	1.1977E+00
4.2-in. Round	a(0)	2.1259E+01	Zo	5.7079E+00
	a(1)	9.5263E-01	A	1.1736E+00
	a(2)	-2.1972E-03	a	6.7897E-01
	a(3)	-2.0525E-05	b	1.3848E-02
			c	-1.3502E-04
	Sw	2.0539E+00	Sh	2.3195E+00
81-mm Round	a(0)	7.5455E+00	Zo	2.2781E+00
	a(1)	9.1175E-01	A	7.3564E-01
	a(2)	-9.4600E-03	a	5.9954E-01
	a(3)	-5.8232E-04	b	9.7660E-02
			c	-4.1573E-03
	Sw	3.4466E-01	Sh	5.1605E-01

TABLE 10. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
15-KNOT HEAD WIND, VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.4932E+01	Zo	4.6251E+00
	a(1)	2.8955E-01	A	1.4499E+00
	a(2)	-3.7315E-04	a	7.7862E-01
	a(3)	-1.1152E-05	b	8.4240E-03
			c	-1.2083E-04
	Sw	7.4491E-01	Sh	2.9264E+00
105-mm Round	a(0)	9.2404E+00	Zo	2.9602E+00
	a(1)	2.5486E-01	A	1.3154E+00
	a(2)	4.6509E-05	a	7.1610E-01
	a(3)	-7.0828E-05	b	2.8292E-02
			c	-7.2806E-04
	Sw	3.2300E-01	Sh	1.3260E+00
4.2-in. Round	a(0)	1.8824E+01	Zo	5.7079E+00
	a(1)	2.9112E-01	A	1.4892E+00
	a(2)	-2.4989E-04	a	7.9285E-01
	a(3)	-5.1136E-06	b	5.3801E-03
			c	-5.5980E-05
	Sw	1.2226E+00	Sh	4.5131E+00
81-mm	a(0)	7.1077E+00	Zo	2.2781E+00
	a(1)	2.2188E-01	A	1.1877E+00
	a(2)	1.3466E-03	a	6.7634E-01
	a(3)	-2.0217E-04	b	5.4458E-02
			c	-1.9983E-03
	Sw	2.1340E-01	Sh	8.9130E-01

TABLE 12. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
15-KNOT CROSS WIND, VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.6710E+01	Zo	4.6251E+00
	a(1)	1.4168E+00	A	1.3538E+00
	a(2)	-6.6084E-03	a	6.7678E-01
	a(3)	-1.5275E-04	b	3.2923E-02
			c	-6.7445E-04
	Sw	1.4259E+00	Sh	1.7147E+00
105-mm Round	a(0)	9.8449E+00	Zo	2.9602E+00
	a(1)	1.4551E+00	A	1.0991E+00
	a(2)	-1.9537E-02	a	6.9447E-01
	a(3)	-6.6919E-04	b	6.3827E-02
			c	-3.0866E-03
	Sw	4.6645E-01	Sh	6.3470E-01
4.2-in. Round	a(0)	2.1099E+01	Zo	5.7079E+00
	a(1)	1.4515E+00	A	1.4070E+00
	a(2)	-5.5579E-03	a	7.3813E-01
	a(3)	-6.4964E-05	b	1.6493E-02
			c	-2.7614E-04
	Sw	1.8996E+00	Sh	2.1906E+00
81-mm Round	a(0)	7.5455E+00	Zo	2.2781E+00
	a(1)	1.3676E+00	A	9.1991E-01
	a(2)	-2.1285E-02	a	6.1790E-01
	a(3)	-1.9653E-03	b	1.4418E-01
			c	-9.3299E-03
	Sw	3.4466E-01	Sh	5.2018E-01

TABLE 13. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT HEAD WIND, VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	2.4679E+01	Zo	6.5733E+00
	a(1)	5.0364E-02	A	1.1553E+00
	a(2)	-1.6835E-05	a	5.6421E-01
	a(3)	-1.8297E-09	b	6.2726E-04
			c	-5.0106E-07
	Sw	2.1101E+00	Sh	5.1926E+00
105-mm Round	a(0)	1.4466E+01	Zo	4.2029E+00
	a(1)	5.8940E-02	A	1.1044E+00
	a(2)	-4.8060E-05	a	5.1250E-01
	a(3)	-2.6741E-08	b	2.4741E-03
			c	-4.4654E-06
	Sw	9.4372E-01	Sh	2.5755E+00
4.2-in. Round	a(0)	2.4288E+01	Zo	6.5581E+00
	a(1)	5.0715E-02	A	1.1533E+00
	a(2)	-1.7473E-05	a	5.6272E-01
	a(3)	-1.9390E-09	b	6.5545E-04
			c	-5.3386E-07
	Sw	2.0415E+00	Sh	5.0712E+00
81-mm Round	a(0)	1.0852E+01	Zo	3.2656E+00
	a(1)	6.3210E-02	A	1.0419E+00
	a(2)	-8.4662E-05	a	4.7945E-01
	a(3)	-1.0860E-07	b	5.0754E-03
			c	-1.4823E-05
	Sw	5.6388E-01	Sh	1.6910E+00

TABLE 14. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT QUARTERING WIND, VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	2.6771E+01	Zo	6.5733E+00
	a(1)	3.0822E-01	A	1.1277E+00
	a(2)	-1.1420E-04	a	4.7342E-01
	a(3)	-2.9252E-07	b	3.8888E-03
			c	-6.8342E-06
	Sw	4.3104E+00	Sh	2.9937E+00
105-mm Round	a(0)	1.5198E+01	Zo	4.2029E+00
	a(1)	3.0826E-01	A	9.8470E-01
	a(2)	-2.4899E-04	a	4.2201E-01
	a(3)	-1.8092E-06	b	1.0763E-02
			c	-4.2340E-05
	Sw	1.6174E+00	Sh	1.5032E+00
4.2-in. Round	a(0)	2.6117E+01	Zo	6.5581E+00
	a(1)	3.1235E-01	A	1.2647E+00
	a(2)	-1.3172E-04	a	4.0984E-01
	a(3)	-2.9362E-07	b	5.4642E-03
			c	-8.9561E-06
	Sw	3.8613E+00	Sh	3.6703E+00
81-mm Round	a(0)	1.1306E+01	Zo	3.2656E+00
	a(1)	3.0318E-01	A	8.7514E-01
	a(2)	-3.5271E-04	a	3.9362E-01
	a(3)	-5.0428E-06	b	1.8802E-02
			c	-1.1652E-04
	Sw	9.4811E-01	Sh	1.0278E+00

TABLE 15. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT CROSS WIND, VISUAL BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	2.9226E+01	Zo	6.5733E+00
	a(1)	4.5272E-01	A	1.1014E+00
	a(2)	-2.4047E-04	a	4.4371E-01
	a(3)	-5.9672E-07	b	5.4909E-03
			c	-1.1348E-05
	Sw	4.8756E+00	Sh	2.6283E+00
105-mm Round	a(0)	1.6507E+01	Zo	4.2029E+00
	a(1)	4.4532E-01	A	1.0234E+00
	a(2)	-4.2591E-04	a	3.2042E-01
	a(3)	-4.0044E-06	b	1.8781E-02
			c	-8.2505E-05
	Sw	2.2218E+00	Sh	1.6238E+00
4.2-in. Round	a(0)	2.8543E+01	Zo	6.5581E+00
	a(1)	4.5725E-01	A	1.0913E+00
	a(2)	-2.6586E-04	a	4.4340E-01
	a(3)	-6.0479E-07	b	5.6209E-03
			c	-1.1903E-05
	Sw	4.4859E+00	Sh	2.5263E+00
81-mm Round	a(0)	1.1981E+01	Zo	3.2656E+00
	a(1)	4.5445E-01	A	8.8510E-01
	a(2)	-8.4772E-04	a	2.7587E-01
	a(3)	-1.0051E-05	b	3.2959E-02
			c	-2.2863E-04
	Sw	1.1286E+00	Sh	1.0943E+00

TABLE 16. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT HEAD WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3212E+01	Zo	4.2393E+00
	a(1)	4.1670E-02	A	8.1033E-01
	a(2)	5.9711E-03	a	7.7609E-01
	a(3)	-1.2436E-04	b	4.9689E-02
			c	-8.3713E-04
	Sw	3.4963E-01	Sh	1.9427E+00
105-mm Round	a(0)	8.3359E+00	Zo	2.6809E+00
	a(1)	-4.2498E-02	A	5.8057E-01
	a(2)	1.1286E-02	a	6.6158E-01
	a(3)	-3.6532E-04	b	1.1343E-01
			c	-3.1554E-03
	Sw	2.6660E-01	Sh	1.1923E+00
4.2-in. Round	a(0)	1.6412E+01	Zo	5.2554E+00
	a(1)	6.4972E-02	A	9.1400E-01
	a(2)	5.1519E-03	a	8.0053E-01
	a(3)	-8.3201E-05	b	3.7829E-02
			c	-5.0225E-04
	Sw	5.0459E-01	Sh	2.8847E+00
81-mm Round	a(0)	6.3176E+00	Zo	2.0474E+00
	a(1)	-2.3126E-02	A	4.8425E-01
	a(2)	9.5727E-03	a	7.8989E-01
	a(3)	-4.9562E-04	b	9.8319E-02
			c	-4.2681E-03
	Sw	8.9302E-02	Sh	4.7268E-01

TABLE 17. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT QUARTERING WIND, ATCM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3242E+01	Zo	4.2393E+00
	a(1)	2.1353E-01	A	7.8680E-01
	a(2)	2.7104E-03	a	7.8757E-01
	a(3)	-1.2781E-04	b	4.9099E-02
			c	-9.1472E-04
	Sw	3.2615E-01	Sh	1.5406E+00
105-mm Round	a(0)	8.2999E+00	Zo	2.6809E+00
	a(1)	1.6280E-01	A	5.5546E-01
	a(2)	5.6315E-03	a	7.4028E-01
	a(3)	-4.3047E-04	b	9.7775E-02
			c	-3.3436E-03
	Sw	1.8274E-01	Sh	7.1158E-01
4.2-in. Round	a(0)	1.6526E+01	Zo	5.2554E+00
	a(1)	2.1249E-01	A	9.0378E-01
	a(2)	2.8702E-03	a	7.8850E-01
	a(3)	-8.3115E-05	b	4.0218E-02
			c	-5.6201E-04
	Sw	5.4174E-01	Sh	2.6861E-00
81-mm Round	a(0)	6.3540E+00	Zo	2.0474E+00
	a(1)	1.5341E-01	A	4.5339E-01
	a(2)	6.2128E-03	a	7.8692E-01
	a(3)	-7.8279E-04	b	1.1420E-01
			c	-5.9940E-03
	Sw	1.0619E-01	Sh	3.9593E-01

TABLE 18. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT CROSS WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3445E+01	Zo	4.2393E+00
	a(1)	3.2735E-01	A	7.7710E-01
	a(2)	1.3742E-03	a	7.4429E-01
	a(3)	-1.5346E-04	b	5.9846E-02
			c	-1.1484E-03
	Sw	4.3882E-01	Sh	1.6801E+00
105-mm Round	a(0)	8.3339E+00	Zo	2.6809E+00
	a(1)	3.2896E-01	A	5.3677E-01
	a(2)	4.0589E-04	a	7.6719E-01
	a(3)	-4.9268E-04	b	9.4603E-02
			c	-3.6865E-03
	Sw	1.7566E-01	Sh	5.6163E-01
4.2-in. Round	a(0)	1.6788E+01	Zo	5.2554E+00
	a(1)	3.1719E-01	A	9.0428E-01
	a(2)	1.6905E-03	a	7.5128E-01
	a(3)	-9.2458E-05	b	4.7033E-02
			c	-6.7097E-04
	Sw	7.0838E-01	Sh	2.9173E+00
81-mm Round	a(0)	6.4315E+00	Zo	2.0474E+00
	a(1)	2.8871E-01	A	4.1416E-01
	a(2)	4.2168E-03	a	7.2456E-01
	a(3)	-1.1297E-03	b	1.5979E-01
			c	-8.7778E-03
	Sw	1.4855E-01	Sh	4.2650E-01

TABLE 19. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
5-KNOT HEAD WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3294E+01	Zo	4.2393E+00
	a(1)	6.4178E-02	A	8.8559E-01
	a(2)	1.2372E-04	a	5.5238E-01
	a(3)	-1.7764E-06	b	1.2683E-02
			c	-6.2501E-05
	Sw	5.2787E-01	Sh	2.0044E+00
105-mm Round	a(0)	8.2241E+00	Zo	2.6809E+00
	a(1)	4.1517E-02	A	6.7281E-01
	a(2)	5.2366E-04	a	4.8364E-01
	a(3)	-1.1316E-05	b	3.5888E-02
			c	-3.8455E-04
	Sw	2.0907E-01	Sh	9.0554E-01
4.2-in. Round	a(0)	1.6591E+01	Zo	5.2554E+00
	a(1)	7.2678E-02	A	9.4952E-01
	a(2)	4.8011E-05	a	5.9012E-01
	a(3)	-7.4239E-07	b	7.5490E-03
			c	-2.6663E-05
	Sw	7.5575E-01	Sh	2.7810E+00
81-mm Round	a(0)	6.3265E+00	Zo	2.0474E+00
	a(1)	1.8154E-02	A	5.3500E-01
	a(2)	1.3456E-03	a	4.8022E-01
	a(3)	-3.4541E-05	b	5.7990E-02
			c	-9.9825E-04
	Sw	1.5692E-01	Sh	6.0164E-01

TABLE 20. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
5-KNOT QUARTERING WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3934E+01	Zo	4.2393E+00
	a(1)	2.5028E-01	A	7.9844E-01
	a(2)	2.7538E-04	a	4.6760E-01
	a(3)	-1.2752E-05	b	2.7996E-02
			c	-2.1312E-04
	Sw	9.4986E-01	Sh	1.5053E+00
105-mm Round	a(0)	8.4292E+00	Zo	2.6809E+00
	a(1)	2.3061E-01	A	5.3361E-01
	a(2)	5.0493E-04	a	4.6618E-01
	a(3)	-6.3605E-05	b	6.2433E-02
			c	-1.0869E-03
	Sw	2.9363E-01	Sh	5.9447E-01
4.2-in. Round	a(0)	1.7403E+01	Zo	5.2554E+00
	a(1)	2.7234E-01	A	9.3397E-01
	a(2)	-1.2941E-05	a	4.6900E-01
	a(3)	-5.3596E-06	b	1.9986E-02
			c	-1.0456E-04
	Sw	1.2033E+00	Sh	2.2260E+00
81-mm Round	a(0)	6.4297E+00	Zo	2.0474E+00
	a(1)	2.0424E-01	A	4.1311E-01
	a(2)	1.3628E-03	a	4.6829E-01
	a(3)	-1.6628E-04	b	1.0152E-01
			c	-2.8160E-03
	Sw	1.7792E-01	Sh	3.9751E-01

TABLE 21. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
5-KNOT CROSS WIND, ATGM BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.4394E+01	Zo	4.2393E+00
	a(1)	4.0288E-01	A	7.5236E-01
	a(2)	-3.0535E-04	a	4.2487E-01
	a(3)	-2.1568E-05	b	3.7348E-02
			c	-3.2972E-04
	Sw	1.0091E+00	Sh	1.3042E+00
105-mm Round	a(0)	8.6854E+00	Zo	2.6809E+00
	a(1)	3.7141E-01	A	4.7808E-01
	a(2)	-1.7726E-04	a	4.4984E-01
	a(3)	-1.1776E-04	b	7.8547E-02
			c	-1.6246E-03
	Sw	4.0317E-01	Sh	5.5269E-01
4.2-in. Round	a(0)	1.8056E+01	Zo	5.2554E+00
	a(1)	4.2694E-01	A	9.6679E-01
	a(2)	-4.9808E-04	a	3.5708E-01
	a(3)	-9.0095E-06	b	3.1778E-02
			c	-1.8540E-04
	Sw	1.2941E+00	Sh	2.2993E+00
81-mm Round	a(0)	6.5722E+00	Zo	2.0474E+00
	a(1)	3.5069E-01	A	3.6365E-01
	a(2)	-6.4154E-05	a	4.6262E-01
	a(3)	-2.9602E-04	b	1.2624E-01
			c	-4.2124E-03
	Sw	2.3266E-01	Sh	3.6626E-01

TABLE 22. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
10-KNOT HEAD WIND, ATGM BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.3228E+01	Zo	4.2393E+00
	a(1)	1.3606E-01	A	1.0780E+00
	a(2)	3.2111E-04	a	6.6294E-01
	a(3)	-1.3202E-05	b	1.8533E-02
			c	-2.1382E-04
	Sw	4.4535E-01	Sh	1.8074E+00
105-mm Round	a(0)	8.1781E+00	Zo	2.6809E+00
	a(1)	9.5550E-02	A	8.4078E-01
	a(2)	1.4329E-03	a	6.4353E-01
	a(3)	-8.1525E-05	b	4.6127E-02
			c	-1.1994E-03
	Sw	1.6222E-01	Sh	7.3127E-01
4.2-in. Round	a(0)	1.6591E+01	Zo	5.2554E+00
	a(1)	1.4536E-01	A	1.1711E+00
	a(2)	1.9205E-04	a	6.7558E-01
	a(3)	-5.9392E-06	b	1.2290E-02
			c	-9.8442E-05
	Sw	7.5575E-01	Sh	2.8290E+00
81-mm Round	a(0)	6.3265E+00	Zo	2.0474E+00
	a(1)	3.6308E-02	A	7.0019E-01
	a(2)	5.3825E-03	a	5.7709E-01
	a(3)	-2.7633E-04	b	9.8811E-02
			c	-3.7194E-03
	Sw	1.5692E-01	Sh	6.1044E-01

TABLE 23. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
10-KNOT QUARTERING WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3934E+01	Zo	4.2393E+00
	a(1)	5.0056E-01	A	9.8911E-01
	a(2)	1.1015E-03	a	5.4193E-01
	a(3)	-1.0202E-04	b	5.0172E-02
			c	-8.1136E-04
	Sw	9.4986E-01	Sh	1.5176E+00
105-mm Round	a(0)	8.3408E+00	Zo	2.6809E+00
	a(1)	5.0028E-01	A	7.0099E-01
	a(2)	-1.3346E-03	a	6.2086E-01
	a(3)	-4.3470E-04	b	8.7579E-02
			c	-3.5807E-03
	Sw	2.1491E-01	Sh	4.9102E-01
4.2-in. Round	a(0)	1.7241E+01	Zo	5.2554E+00
	a(1)	5.6621E-01	A	1.0801E+00
	a(2)	-6.0790E-04	a	6.1057E-01
	a(3)	-3.9178E-05	b	2.7625E-02
			c	-3.3391E-04
	Sw	1.0121E+00	Sh	1.8153E+00
81-mm Round	a(0)	6.3546E+00	Zo	2.0474E+00
	a(1)	4.6103E-01	A	5.9903E-01
	a(2)	-1.6937E-03	a	6.8169E-01
	a(3)	-1.0801E-03	b	1.1498E-01
			c	-8.2362E-03
	Sw	1.1470E-01	Sh	2.9044E-01

TABLE 24. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
10-KNOT CROSS WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.4394E+01	Zo	4.2393E+00
	a(1)	8.0576E-01	A	9.1957E-01
	a(2)	-1.2214E-03	a	4.9739E-01
	a(3)	-1.7254E-04	b	6.7886E-02
			c	-1.2614E-03
	Sw	1.0091E+00	Sh	1.3129E+00
105-mm Round	a(0)	8.6854E+00	Zo	2.6809E+00
	a(1)	7.4282E-01	A	6.2315E-01
	a(2)	-7.0905E-04	a	5.5175E-01
	a(3)	-9.4205E-04	b	1.3519E-01
			c	-6.0773E-03
	Sw	4.0317E-01	Sh	5.6101E-01
4.2-in. Round	a(0)	1.7882E+01	Zo	5.2554E+00
	a(1)	8.8161E-01	A	1.0222E+00
	a(2)	-2.8474E-03	a	5.8317E-01
	a(3)	-6.5290E-05	b	3.6262E-02
			c	-5.0489E-04
	Sw	1.1175E+00	Sh	1.5361E+00
81-mm Round	a(0)	6.5722E+00	Zo	2.0474E+00
	a(1)	7.0137E-01	A	4.9971E-01
	a(2)	-2.5662E-04	a	5.7452E-01
	a(3)	-2.3682E-03	b	2.1506E-01
			c	-1.5721E-02
	Sw	2.3266E-01	Sh	3.7342E-01

TABLE 25. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
15-KNOT HEAD WIND HEAD WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3181E+01	Zo	4.2393E+00
	a(1)	2.1232E-01	A	1.2970E+00
	a(2)	4.4301E-04	a	7.2594E-01
	a(3)	-4.2112E-05	b	2.1949E-02
			c	-4.3311E-04
	Sw	3.9557E-01	Sh	1.6756E+00
105-mm Round	a(0)	8.1781E+00	Zo	2.6809E+00
	a(1)	1.4332E-01	A	1.0536E+00
	a(2)	3.2241E-03	a	6.7427E-01
	a(3)	-2.7515E-04	b	6.5448E-02
			c	-2.6520E-03
	Sw	1.6222E-01	Sh	7.3919E-01
4.2-in. Round	a(0)	1.6591E+01	Zo	5.2554E+00
	a(1)	2.1803E-01	A	1.4051E+00
	a(2)	4.3210E-04	a	7.1947E-01
	a(3)	-2.0045E-05	b	1.6489E-02
			c	-2.1339E-04
	Sw	7.5575E-01	Sh	2.8622E+00
81-mm Round	a(0)	6.3265E+00	Zo	2.0474E+00
	a(1)	5.4462E-02	A	8.6714E-01
	a(2)	1.2111E-02	a	6.0256E-01
	a(3)	-9.3262E-04	b	1.4374E-01
			c	-8.2867E-03
	Sw	1.5692E-01	Sh	6.1460E-01

TABLE 26. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
15-KNOT QUARTERING WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.3934E+01	Zo	4.2393E+00
	a(1)	7.5084E-01	A	1.1854E+00
	a(2)	2.4785E-03	a	5.6869E-01
	a(3)	-3.4431E-04	b	7.2857E-02
			c	-1.8038E-03
	Sw	9.4986E-01	Sh	1.5264E+00
105-mm Round	a(0)	8.2810E+00	Zo	2.6809E+00
	a(1)	7.9067E-01	A	9.2478E-01
	a(2)	-8.2619E-03	a	7.2228E-01
	a(3)	-1.2902E-03	b	8.7318E-02
			c	-6.4968E-03
	Sw	1.6816E-01	Sh	3.8658E-01
4.2-in. Round	a(0)	1.7241E+01	Zo	5.2554E+00
	a(1)	8.4932E-01	A	1.3057E+00
	a(2)	-1.3678E-03	a	6.4468E-01
	a(3)	-1.3223E-04	b	3.9116E-02
			c	-7.3581E-04
	Sw	1.0121E+00	Sh	1.8309E+00
81-mm Round	a(0)	6.4297E+00	Zo	2.0474E+00
	a(1)	6.1271E-01	A	6.9926E-01
	a(2)	1.2265E-02	a	5.9713E-01
	a(3)	-4.4894E-03	b	2.5406E-01
			c	-2.3489E-02
	Sw	1.7792E-01	Sh	4.0730E-01

TABLE 27. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
15-KNOT CROSS WIND, ATGM BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.4190E+01	Zo	4.2393E+00
	a(1)	1.2789E+00	A	1.0887E+00
	a(2)	-7.4571E-03	a	5.0260E-01
	a(3)	-5.0105E-04	b	1.0478E-01
			c	-2.9195E-03
	Sw	7.8677E-01	Sh	1.2884E+00
105-mm Round	a(0)	8.6854E+00	Zo	2.6809E+00
	a(1)	1.1142E+00	A	7.6800E-01
	a(2)	-1.5954E-03	a	5.7887E-01
	a(3)	-3.1794E-03	b	1.9670E-01
			c	-1.3533E-02
	Sw	4.0317E-01	Sh	5.6441E-01
4.2-in. Round	a(0)	1.7747E+01	Zo	5.2554E+00
	a(1)	1.3547E+00	A	1.2141E+00
	a(2)	-7.9055E-03	a	6.6473E-01
	a(3)	-2.0242E-04	b	4.2152E-02
			c	-9.8619E-04
	Sw	9.9748E-01	Sh	1.3483E+00
81-mm Round	a(0)	6.4002E+00	Zo	2.0474E+00
	a(1)	1.2686E+00	A	7.8570E-01
	a(2)	-5.3516E-02	a	7.7736E-01
	a(3)	-4.6608E-03	b	1.3222E-01
			c	-2.1829E-02
	Sw	9.9908E-02	Sh	1.8498E-01

TABLE 28. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT HEAD WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	2.0206E+01	Zo	6.0693E+00
	a(1)	4.8433E-02	A	1.1009E+00
	a(2)	-2.5704E-05	a	5.1475E-01
	a(3)	-1.3917E-08	b	1.8872E-03
			c	-2.3591E-06
	Sw	1.1296E+00	Sh	3.3259E+00
105-mm Round	a(0)	1.2219E+01	Zo	3.8434E+00
	a(1)	4.9186E-02	A	1.0528E+00
	a(2)	-4.7006E-05	a	4.0531E-01
	a(3)	-1.9985E-07	b	8.5733E-03
			c	-2.4481E-05
	Sw	5.1592E-01	Sh	1.8887E+00
4.2-in. Round	a(0)	1.9951E+01	Zo	6.0528E+00
	a(1)	4.8103E-02	A	1.1063E+00
	a(2)	-2.5260E-05	a	5.0885E-01
	a(3)	-1.5662E-08	b	2.0303E-03
			c	-2.5653E-06
	Sw	1.1617E+00	Sh	3.3682E+00
81-mm Round	a(0)	9.2773E+00	Zo	2.9674E+00
	a(1)	4.7513E-02	A	9.5988E-01
	a(2)	-5.5608E-05	a	3.3232E-01
	a(3)	-7.9582E-07	b	1.8558E-02
			c	-8.7274E-05
	Sw	2.9359E-01	Sh	1.3111E+00

TABLE 29. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT QUARTERING WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	2.1502E+01	Zo	6.0693E+00
	a(1)	2.8801E-01	A	1.0808E+00
	a(2)	-1.3028E-04	a	3.6078E-01
	a(3)	-1.0389E-06	b	1.0767E-02
			c	-2.9321E-05
	Sw	2.2185E+00	Sh	2.2533E+00
105-mm Round	a(0)	1.2813E+01	Zo	3.8434E+00
	a(1)	2.6324E-01	A	8.0703E-01
	a(2)	-4.6004E-05	a	3.3081E-01
	a(3)	-7.2628E-06	b	2.6301E-02
			c	-1.7023E-04
	Sw	9.5668E-01	Sh	1.0532E+00
4.2-in. Round	a(0)	2.1089E+01	Zo	6.0528E+00
	a(1)	2.9048E-01	A	1.0587E+00
	a(2)	-1.5031E-04	a	3.6596E-01
	a(3)	-1.0640E-06	b	1.0816E-02
			c	-3.0338E-05
	Sw	2.0526E+00	Sh	2.1372E+00
81-mm Round	a(0)	9.6750E+00	Zo	2.9674E+00
	a(1)	2.4539E-01	A	6.2428E-01
	a(2)	1.4722E-04	a	3.8041E-01
	a(3)	-2.0942E-05	b	3.6570E-02
			c	-4.0628E-04
	Sw	5.6415E-01	Sh	6.4736E-01

TABLE 30. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT CROSS WIND, ATGM BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	2.3137E+01	Zo	6.0693E+00
	a(1)	4.2828E-01	A	9.8196E-01
	a(2)	-2.9732E-04	a	3.5054E-01
	a(3)	-2.1704E-06	b	1.3460E-02
			c	-4.5043E-05
	Sw	2.7948E+00	Sh	1.8369E+00
105-mm Round	a(0)	1.3335E+01	Zo	3.8434E+00
	a(1)	4.2025E-01	A	6.9504E-01
	a(2)	-6.6341E-04	a	3.4819E-01
	a(3)	-1.3291E-05	b	3.0703E-02
			c	-2.5027E-04
	Sw	1.0038E+00	Sh	8.1625E-01
4.2-in. Round	a(0)	2.2566E+01	Zo	6.0528E+00
	a(1)	4.3635E-01	A	9.6175E-01
	a(2)	-3.7026E-04	a	3.5525E-01
	a(3)	-2.1458E-06	b	1.3562E-02
			c	-4.6731E-05
	Sw	2.4486E+00	Sh	1.7230E+00
81-mm Round	a(0)	1.0089E+01	Zo	2.9674E+00
	a(1)	3.8591E-01	A	5.4110E-01
	a(2)	-2.8580E-04	a	3.9291E-01
	a(3)	-4.2217E-05	b	4.4034E-02
			c	-6.1668E-04
	Sw	7.2422E-01	Sh	5.8895E-01

TABLE 31. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT HEAD WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.3761E+00	Zo	3.0761E+00
	a(1)	-1.8568E-01	A	3.7596E-01
	a(2)	1.4958E-02	a	7.1855E-01
	a(3)	-1.0981E-03	b	1.7546E-01
			c	-1.0984E-02
	Sw	6.7496E-02	Sh	3.3264E-01
105-mm Round	a(0)	5.4825E+00	Zo	1.8072E+00
	a(1)	-2.8457E-01	A	3.1629E-01
	a(2)	3.3003E-02	a	1.0485E+00
	a(3)	-4.5740E-03	b	1.8142E-02
			c	-2.4146E-02
	Sw	3.9490E-02	Sh	2.1676E-01
4.2-in. Round	a(0)	1.2027E+01	Zo	3.9085E+00
	a(1)	-2.2681E-01	A	4.4993E-01
	a(2)	2.0013E-02	a	5.6787E-01
	a(3)	-8.7075E-04	b	1.9099E-01
			c	-7.6340E-03
	Sw	2.2925E-01	Sh	8.4628E-01
81-mm Round	a(0)	3.9731E+00	Zo	1.3074E+00
	a(1)	-2.7419E-01	A	2.0667E-01
	a(2)	2.0154E-02	a	1.0057E+00
	a(3)	-6.9261E-03	b	2.4894E-01
			c	-1.1057E-01
	Sw	8.4767E-03	Sh	6.2981E-02

TABLE 32. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT QUARTERING WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.3893E+00	Zo	3.0761E+00
	a(1)	-8.1901E-02	A	3.3812E-01
	a(2)	1.3080E-02	a	6.7014E-01
	a(3)	-1.5228E-03	b	2.3135E-01
			c	-1.5773E-02
	Sw	7.2899E-02	Sh	3.2379E-01
105-mm Round	a(0)	5.5543E+00	Zo	1.8072E+00
	a(1)	-3.0927E-01	A	5.0353E-01
	a(2)	7.4380E-02	a	1.3615E+00
	a(3)	-1.0815E-02	b	-4.4239E-01
			c	1.3449E-02
	Sw	1.1100E-01	Sh	4.5474E-01
4.2-in. Round	a(0)	1.1931E+01	Zo	3.9085E+00
	a(1)	-6.0670E-02	A	4.4232E-01
	a(2)	1.1222E-02	a	6.5656E-01
	a(3)	-8.6509E-04	b	1.6708E-01
			c	-7.8435E-03
	Sw	1.1973E-01	Sh	5.0405E-01
81-mm Round	a(0)	3.9720E+00	Zo	1.3074E+00
	a(1)	-1.7074E-01	A	4.3220E-01
	a(2)	7.3828E-03	a	1.3597E+00
	a(3)	-1.1003E-02	b	-6.9711E-01
			c	1.9539E-02
	Sw	7.4876E-03	Sh	8.3290E-02

TABLE 33. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT CROSS WIND, MID IR BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	9.4442E+00	Zo	3.0761E+00
	a(1)	-1.8019E-02	A	3.4239E-01
	a(2)	1.6609E-02	a	7.4278E-01
	a(3)	-2.2339E-03	b	1.9966E-01
			c	-1.6246E-02
	Sw	1.1042E-01	Sh	3.5592E-01
105-mm Round	a(0)	5.5125E+00	Zo	1.8072E+00
	a(1)	-1.3743E-01	A	5.6253E-01
	a(2)	4.6591E-02	a	1.4342E+00
	a(3)	-1.1432E-02	b	-6.1278E-01
			c	2.7870E-02
	Sw	5.8938E-02	Sh	3.5801E-01
4.2-in. Round	a(0)	1.2066E+01	Zo	3.9085E+00
	a(1)	-3.6880E-02	A	4.1328E-01
	a(2)	1.8250E-02	a	6.1056E-01
	a(3)	-1.3577E-03	b	2.0174E-01
			c	-9.9554E-03
	Sw	2.3229E-01	Sh	6.7298E-01
81-mm Round	a(0)	4.0034E+00	Zo	1.3074E+00
	a(1)	-1.7158E-01	A	1.2090E+00
	a(2)	5.4071E-02	a	1.7896E+00
	a(3)	-2.5470E-02	b	-2.2180E+00
			c	3.2292E-01
	Sw	2.7587E-02	Sh	4.4686E-01

TABLE 34. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
5-KNOT HEAD WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.4105E+00	Zo	3.0761E+00
	a(1)	-9.5581E-02	A	3.4014E-01
	a(2)	3.5511E-03	a	5.1702E-01
	a(3)	-7.6810E-05	b	7.1756E-02
			c	-1.7244E-03
	Sw	1.4307E-01	Sh	5.1679E-01
105-mm Round	a(0)	5.4564E+00	Zo	1.8072E+00
	a(1)	-1.5745E-01	A	2.4453E-01
	a(2)	8.5279E-03	a	1.0802E+00
	a(3)	-5.3359E-04	b	-8.9950E-02
			c	-2.5221E-03
	Sw	2.8309E-02	Sh	2.4031E-01
4.2-in. Round	a(0)	1.1904E+01	Zo	3.9085E+00
	a(1)	-5.8377E-02	A	4.6825E-01
	a(2)	1.7775E-03	a	3.9625E-01
	a(3)	-2.7450E-05	b	6.3082E-02
			c	-8.7061E-04
	Sw	1.7118E-01	Sh	6.8597E-01
81-mm Round	a(0)	3.9794E+00	Zo	1.3074E+00
	a(1)	-2.1616E-01	A	4.5953E-01
	a(2)	1.6308E-02	a	1.6589E+00
	a(3)	-1.8543E-03	b	-7.8585E-01
			c	3.9483E-02
	Sw	1.5464E-02	Sh	2.7652E-01

TABLE 35. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
5-KNOT QUARTERING WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.5153E+00	Zo	3.0761E+00
	a(1)	1.2781E-02	A	2.6823E-01
	a(2)	6.9076E-03	a	7.5633E-01
	a(3)	-3.3129E-04	b	4.3802E-02
			c	-2.8916E-03
	Sw	1.8794E-01	Sh	5.0264E-01
105-mm Round	a(0)	5.4866E+00	Zo	1.8072E+00
	a(1)	-6.1544E-02	A	4.1860E-01
	a(2)	1.3121E-02	a	1.6296E+00
	a(3)	-1.9236E-03	b	-6.0556E-01
			c	2.3296E-02
	Sw	4.2057E-02	Sh	3.9896E-01
4.2-in. Round	a(0)	1.2122E+01	Zo	3.9085E+00
	a(1)	5.0221E-02	A	3.3749E-01
	a(2)	4.2934E-03	a	5.7113E-01
	a(3)	-1.4195E-04	b	6.1917E-02
			c	-1.6470E-03
	Sw	3.0396E-01	Sh	6.4808E-01
81-mm Round	a(0)	3.9959E+00	Zo	1.3074E+00
	a(1)	-1.3966E-01	A	8.2973E-01
	a(2)	2.4839E-02	a	1.8980E+00
	a(3)	-6.0817E-03	b	-1.6445E+00
			c	1.5210E-01
	Sw	2.3651E-02	Sh	5.3676E-01

TABLE 36. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
5-KNOT CROSS WIND, MID IR BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	9.5750E+00	Zo	3.0761E+00
	a(1)	1.3469E-01	A	2.6380E-01
	a(2)	6.5871E-03	a	1.0446E+00
	a(3)	-5.6785E-04	b	-5.7603E-02
			c	-1.3095E-03
	Sw	2.0724E-01	Sh	5.7623E-01
105-mm Round	a(0)	5.5255E+00	Zo	1.8072E+00
	a(1)	1.6694E-02	A	5.9484E-01
	a(2)	1.8677E-02	a	1.8672E+00
	a(3)	-3.8234E-03	b	-1.0226E+00
			c	5.7389E-02
	Sw	6.6718E-02	Sh	6.0535E-01
4.2-in. Round	a(0)	1.2250E+01	Zo	3.9085E+00
	a(1)	1.6868E-01	A	2.9367E-01
	a(2)	4.5075E-03	a	7.1959E-01
	a(3)	-2.5226E-04	b	3.7765E-02
			c	-1.8094E-03
	Sw	3.6335E-01	Sh	6.9262E-01
81-mm Round	a(0)	4.0324E+00	Zo	1.3074E+00
	a(1)	-1.1408E-01	A	5.8637E-01
	a(2)	5.2285E-02	a	1.6712E+00
	a(3)	-1.3804E-02	b	-1.7245E+00
			c	2.0994E-01
	Sw	5.0188E-02	Sh	8.7112E-01

TABLE 37. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
10-KNOT HEAD WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.4105E+00	Zo	3.0761E+00
	a(1)	-1.9116E-01	A	4.6317E-01
	a(2)	1.4204E-02	a	6.5914E-01
	a(3)	-6.1448E-04	b	1.0994E-01
			c	-6.1985E-03
	Sw	1.4307E-01	Sh	5.2781E-01
105-mm Round	a(0)	5.4564E+00	Zo	1.8072E+00
	a(1)	-3.1490E-01	A	5.0790E-01
	a(2)	3.4112E-02	a	1.1389E+00
	a(3)	-4.2687E-03	b	-1.9554E-01
			c	-9.7670E-03
	Sw	2.8309E-02	Sh	2.3863E-01
4.2-in. Round	a(0)	1.1904E+01	Zo	3.9085E+00
	a(1)	-1.1675E-01	A	5.6695E-01
	a(2)	7.1100E-03	a	5.1033E-01
	a(3)	-2.1960E-04	b	1.0811E-01
			c	-3.2346E-03
	Sw	1.7118E-01	Sh	6.9473E-01
81-mm Round	a(0)	3.9635E+00	Zo	1.3074E+00
	a(1)	-3.8538E-01	A	3.8947E-01
	a(2)	3.8379E-02	a	1.0812E+00
	a(3)	-1.0877E-02	b	-8.5749E-02
			c	-1.0025E-01
	Sw	4.6678E-03	Sh	5.7398E-02

TABLE 38. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
10-KNOT QUARTERING WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.4209E+00	Zo	3.0761E+00
	a(1)	1.0600E-01	A	4.3536E-01
	a(2)	1.4307E-02	a	8.5658E-01
	a(3)	-2.0822E-03	b	6.3109E-02
			c	-1.0869E-02
	Sw	1.0280E-01	Sh	3.4807E-01
105-mm Round	a(0)	5.4866E+00	Zo	1.8072E+00
	a(1)	-1.2309E-01	A	1.0507E+00
	a(2)	5.2484E-02	a	1.5322E+00
	a(3)	-1.5389E-02	b	-1.0569E+00
			c	7.8078E-02
	Sw	4.2057E-02	Sh	3.9107E-01
4.2-in. Round	a(0)	1.2122E+01	Zo	3.9085E+00
	a(1)	1.0044E-01	A	4.7545E-01
	a(2)	1.7174E-02	a	7.1510E-01
	a(3)	-1.1356E-03	b	9.0244E-02
			c	-5.8924E-03
	Sw	3.0396E-01	Sh	6.5843E-01
81-mm Round	a(0)	3.9959E+00	Zo	1.3074E+00
	a(1)	-2.7932E-01	A	1.8609E+00
	a(2)	9.9355E-02	a	1.6594E+00
	a(3)	-4.8654E-02	b	-2.7669E+00
			c	5.2419E-01
	Sw	2.3651E-02	Sh	5.1673E-01

TABLE 39. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 10-KNOT CROSS WIND,
MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.4602E+00	Zo	3.0761E+00
	a(1)	3.8647E-01	A	4.4766E-01
	a(2)	3.1466E-03	a	9.8963E-01
	a(3)	-3.3592E-03	b	-1.1867E-02
			c	-1.2438E-02
	Sw	1.1030E-01	Sh	3.5130E-01
105-mm Round	a(0)	5.5255E+00	Zo	1.8072E+00
	a(1)	3.3389E-02	A	1.5485E+00
	a(2)	7.4708E-02	a	1.6914E+00
	a(3)	-3.0587E-02	b	-1.7657E+00
			c	1.9875E-01
	Sw	6.6718E-02	Sh	5.9058E-01
4.2-in. Round	a(0)	1.2093E+01	Zo	3.9085E+00
	a(1)	4.4247E-01	A	4.4372E-01
	a(2)	4.3589E-03	a	7.9715E-01
	a(3)	-1.5603E-03	b	7.4147E-02
			c	-7.7239E-03
	Sw	2.1158E-01	Sh	4.8934E-01
81-mm Round	a(0)	3.9726E+00	Zo	1.3074E+00
	a(1)	5.2163E-02	A	2.3067E+00
	a(2)	-4.6291E-02	a	1.6942E+00
	a(3)	-5.0419E-02	b	-4.0400E+00
			c	1.0747E+00
	Sw	7.5885E-03	Sh	4.1400E-01

TABLE 40. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 15-KNOT HEAD WIND,
MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.3233E+00	Zo	3.0761E+00
	a(1)	-2.1293E-01	A	5.4322E-01
	a(2)	1.9812E-02	a	5.9829E-01
	a(3)	-1.5592E-03	b	2.2514E-01
			c	-1.7133E-02
	Sw	5.8831E-02	Sh	3.6480E-01
105-mm Round	a(0)	5.4260E+00	Zo	1.8072E+00
	a(1)	-3.9845E-01	A	5.0667E-01
	a(2)	4.1805E-02	a	9.1201E-01
	a(3)	-1.0149E-02	b	1.5751E-01
			c	-8.1761E-02
	Sw	6.6456E-03	Sh	7.0731E-02
4.2-in Round	a(0)	1.1825E+01	Zo	3.9085E+00
	a(1)	-1.3173E-01	A	6.3442E-01
	a(2)	1.1367E-02	a	4.0673E-01
	a(3)	-6.1394E-04	b	2.1874E-01
			c	-9.1518E-03
	Sw	9.6527E-02	Sh	7.4909E-01
81-mm Round	a(0)	3.9584E+00	Zo	1.3074E+00
	a(1)	-5.5299E-01	A	5.6251E-01
	a(2)	6.2539E-02	a	1.0440E+00
	a(3)	-3.0887E-02	b	-1.2517E-01
			c	-1.9435E-01
	Sw	1.4652E-03	Sh	2.5783E-02

TABLE 41. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 15-KNOT QUARTERING WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.4209E+00	Zo	3.0761E+00
	a(1)	1.5900E-01	A	6.0504E-01
	a(2)	3.2192E-02	a	8.7542E-01
	a(3)	-7.0275E-03	b	9.3522E-02
			c	-2.4596E-02
	Sw	1.0280E-01	Sh	3.4688E-01
105-mm Round	a(0)	5.4340E+00	Zo	1.8072E+00
	a(1)	9.7056E-04	A	3.5992E-01
	a(2)	-9.2128E-03	a	8.5305E-01
	a(3)	-2.9424E-02	b	6.3678E-01
			c	-3.0825E-01
	Sw	7.3084E-03	Sh	6.9539E-02
4.2-in. Round	a(0)	1.1938E+01	Zo	3.9085E+00
	a(1)	3.0584E-01	A	5.5712E-01
	a(2)	1.3095E-02	a	6.2780E-01
	a(3)	-2.7499E-03	b	2.1387E-01
			c	-1.7359E-02
	Sw	1.3344E-01	Sh	3.9732E-01
81-mm Round	a(0)	3.9604E+00	Zo	1.3074E+00
	a(1)	-1.9370E-01	A	5.0943E-01
	a(2)	-5.5283E-02	a	1.0593E+00
	a(3)	-7.4895E-02	b	-2.3644E-02
			c	-6.0238E-01
	Sw	1.4942E-03	Sh	1.9354E-02

TABLE 2. COEFFICIENTS FOR NEUTRAL METEOROLOGY,
15-KNOT CROSS WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	9.4602E+00	Zo	3.0761E+00
	a(1)	5.7971E-01	A	6.4570E-01
	a(2)	7.0799E-03	a	9.8973E-01
	a(3)	-1.1337E-02	b	-3.7793E-03
			c	-2.9161E-02
	Sw	1.1030E-01	Sh	3.4862E-01
105-mm Round	a(0)	5.5255E+00	Zo	1.8072E+00
	a(1)	5.0083E-02	A	2.2505E+00
	a(2)	1.6809E-01	a	1.5383E+00
	a(3)	-1.0323E-01	b	-2.3275E+00
			c	3.9607E-01
	Sw	6.6718E-02	Sh	5.8143E-01
4.2-in. Round	a(0)	1.2010E+01	Zo	3.9085E+00
	a(1)	7.4858E-01	A	5.6374E-01
	a(2)	-7.1305E-03	a	7.6566E-01
	a(3)	-4.3959E-03	b	1.5605E-01
			c	-2.0230E-02
	Sw	1.4892E-01	Sh	3.5925E-01
81-mm Round	a(0)	3.9726E+00	Zo	1.3074E+00
	a(1)	7.8245E-02	A	2.9363E+00
	a(2)	-1.0416E-01	a	1.5251E+00
	a(3)	-1.7016E-01	b	-5.3835E+00
			c	2.2060E+00
	Sw	7.5885E-03	Sh	4.0312E-01

TABLE 43. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT HEAD WIND, MID IR BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.3918E+01	Zo	4.5807E+00
	a(1)	-1.4447E-02	A	6.4692E-01
	a(2)	2.8258E-04	a	3.2411E-01
	a(3)	-1.9793E-06	b	2.3655E-02
			c	-1.3223E-04
	Sw	2.6519E-01	Sh	9.3097E-01
105-mm Round	a(0)	8.3341E+00	Zo	2.7521E+00
	a(1)	-6.2685E-02	A	3.1458E-01
	a(2)	1.5593E-03	a	4.9026E-01
	a(3)	-2.6713E-05	b	4.5067E-02
			c	-9.5652E-04
	Sw	9.2160E-02	Sh	4.0704E-01
4.2-in. Round	a(0)	1.3698E+01	Zo	4.5589E+00
	a(1)	-1.4551E-02	A	6.3395E-01
	a(2)	2.8648E-04	a	3.2292E-01
	a(3)	-2.0932E-06	b	2.4481E-02
			c	-1.4122E-04
	Sw	2.4664E-01	Sh	8.9443E-01
81-mm Round	a(0)	6.2032E+00	Zo	2.0447E+00
	a(1)	-1.0218E-01	A	2.2701E-01
	a(2)	3.6203E-03	a	8.7166E-01
	a(3)	-1.1204E-04	b	-1.9851E-02
			c	-1.3621E-03
	Sw	4.3353E-02	Sh	3.1207E-01

TABLE 44. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT QUARTERING WIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.4342E+01	Zo	4.5807E+00
	a(1)	1.2195E-01	A	3.4124E-01
	a(2)	1.4931E-03	a	5.5751E-01
	a(3)	-3.4390E-05	b	2.2993E-02
			c	-4.2385E-04
	Sw	4.8982E-01	Sh	8.2691E-01
105-mm Round	a(0)	8.4768E+00	Zo	2.7521E+00
	a(1)	4.5747E-02	A	2.3210E-01
	a(2)	4.8578E-03	a	1.1781E+00
	a(3)	-2.5029E-04	b	-1.1900E-01
			c	8.2702E-04
	Sw	1.5269E-01	Sh	6.1394E-01
4.2-in. Round	a(0)	1.4080E+01	Zo	4.5589E+00
	a(1)	1.2588E-01	A	3.3190E-01
	a(2)	1.3757E-03	a	5.6918E-01
	a(3)	-3.5062E-05	b	2.2347E-02
			c	-4.3960E-04
	Sw	4.3219E-01	Sh	7.9354E-01
81-mm Round	a(0)	6.2711E+00	Zo	2.0447E+00
	a(1)	-3.9214E-03	A	3.0984E-01
	a(2)	8.2026E-03	a	1.6149E+00
	a(3)	-7.4893E-04	b	-4.3186E-01
			c	1.1245E-02
	Sw	6.8691E-02	Sh	5.4151E-01

TABLE 45. COEFFICIENTS FOR INVERSION METEOROLOGY,
5-KNOT CROSSWIND, MID IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.4587E+01	Zo	4.5807E+00
	a(1)	2.5616E-01	A	2.6084E-01
	a(2)	1.1424E-03	a	7.7119E-01
	a(3)	-6.5845E-05	b	-3.8662E-03
			c	-3.5628E-04
	Sw	5.6415E-01	Sh	9.1373E-01
105-mm Round	a(0)	8.4860E+00	Zo	2.7521E+00
	a(1)	1.9986E-01	A	2.4222E-01
	a(2)	1.3242E-03	a	1.4645E+00
	a(3)	-4.0157E-04	b	-2.6508E-01
			c	4.5639E-03
	Sw	1.2595E-01	Sh	6.5965E-01
4.2-in. Round	a(0)	1.4428E+01	Zo	4.5589E+00
	a(1)	2.3934E-01	A	2.5306E-01
	a(2)	1.7465E-03	a	8.1007E-01
	a(3)	-7.5042E-05	b	-1.0937E-02
			c	-2.9269E-04
	Sw	6.5134E-01	Sh	9.8658E-01
81-mm Round	a(0)	6.3163E+00	Zo	2.0447E+00
	a(1)	1.0016E-01	A	3.8073E-01
	a(2)	8.8423E-03	a	1.7910E+00
	a(3)	-1.4901E-03	b	-6.9241E-01
			c	2.6405E-02
	Sw	9.1436E-02	Sh	7.4013E-01

TABLE 46. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT HEAD WIND, FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0267E+01	Zo	3.3348E+00
	a(1)	-1.7043E-01	A	4.4294E-01
	a(2)	1.6972E-02	a	6.0301E-01
	a(3)	-8.9057E-04	b	1.8235E-01
			c	-7.5797E-03
	Sw	1.6547E-01	Sh	7.0396E-01
105-mm Round	a(0)	6.1229E+00	Zo	2.0076E+00
	a(1)	-2.3196E-01	A	2.9939E-01
	a(2)	2.8572E-02	a	8.1156E-01
	a(3)	-2.6158E-03	b	2.0027E-01
			c	-2.1720E-01
	Sw	7.2125E-02	Sh	2.9362E-01
4.2-in. Round	a(0)	1.2970E+01	Zo	4.2050E+00
	a(1)	-1.5454E-01	A	5.6024E-01
	a(2)	1.4636E-02	a	5.8192E-01
	a(3)	-5.0615E-04	b	1.4473E-01
			c	-4.3660E-03
	Sw	2.7400E-01	Sh	1.1362E+00
81-mm Round	a(0)	4.5132E+00	Zo	1.4810E+00
	a(1)	-2.0927E-01	A	2.3071E-01
	a(2)	2.0354E-02	a	8.6639E-01
	a(3)	-3.7454E-03	b	2.8070E-01
			c	-5.1522E-02
	Sw	1.8048E-02	Sh	1.1090E-01

TABLE 47. COEFFICIENTS FOR LAPSE METEOROLOGY,
5-KNOT QUARTERING WIND, FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0234E+01	Zo	3.3348E+00
	a(1)	-2.3867E-02	A	4.2702E-01
	a(2)	1.1651E-02	a	6.5795E-01
	a(3)	-9.4336E-04	b	1.7523E-01
			c	-8.5406E-03
	Sw	1.2171E-01	Sh	4.9379E-01
105-mm Round	a(0)	6.1165E+00	Zo	2.0076E+00
	a(1)	-1.0346E-01	A	2.9051E-01
	a(2)	2.4924E-02	a	8.5497E-01
	a(3)	-3.8354E-03	b	1.9987E-01
			c	-2.8394E-02
	Sw	6.1204E-02	Sh	2.2550E-01
4.2-in. Round	a(0)	1.2961E+01	Zo	4.2050E+00
	a(1)	-2.9002E-02	A	5.1368E-01
	a(2)	1.1857E-02	a	4.5581E-01
	a(3)	-5.9642E-04	b	2.0279E-01
			c	-6.4148E-03
	Sw	2.3811E-01	Sh	1.1355E+00
81-mm Round	a(0)	4.5447E+00	Zo	1.4810E+00
	a(1)	-1.4863E-01	A	3.3727E-01
	a(2)	3.7209E-02	a	1.1407E+00
	a(3)	-8.5635E-03	b	-8.6758E-02
			c	-3.0412E-02
	Sw	3.9388E-02	Sh	1.8307E-01

TABLE 48. COEFFICIENTS FOR LAPSE METEOROLOGY, 5-KNOT CROSS WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0229E+01	Zo	3.3348E+00
	a(1)	1.0755E-01	A	4.2293E-01
	a(2)	5.9622E-03	a	7.2223E-01
	a(3)	-1.0676E-03	b	1.5473E-01
			c	-8.7718E-03
	Sw	1.0726E-01	Sh	3.7799E-01
105-mm Round	a(0)	6.1430E+00	Zo	2.0076E+00
	a(1)	-1.6849E-02	A	3.1823E-01
	a(2)	2.8118E-02	a	9.6778E-01
	a(3)	-5.6422E-03	b	1.0120E-01
			c	-2.6554E-02
	Sw	7.8648E-02	Sh	2.6387E-01
4.2-in. Round	a(0)	1.3011E+01	Zo	4.2050E+00
	a(1)	6.7301E-02	A	5.0938E-01
	a(2)	1.0645E-02	a	5.7664E-01
	a(3)	-7.2631E-04	b	1.6774E-01
			c	-5.9989E-03
	Sw	2.6397E-01	Sh	8.7992E-01
81-mm Round	a(0)	4.5323E+00	Zo	1.4810E+00
	a(1)	-3.4455E-03	A	3.8535E-01
	a(2)	1.7012E-02	a	1.2343E+00
	a(3)	-1.0178E-02	b	-2.7624E-01
			c	-1.7590E-02
	Sw	2.8495E-02	Sh	1.5309E-01

TABLE 49. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 5-KNOT HEAD WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0237E+01	Zo	3.3348E+00
	a(1)	-5.4862E-02	A	4.6817E-01
	a(2)	2.2013E-03	a	4.0750E-01
	a(3)	-3.5987E-05	b	6.6804E-02
			c	-1.0120E-03
	Sw	2.1884E-01	Sh	7.1871E-01
105-mm Round	a(0)	6.0682E+00	Zo	2.0076E+00
	a(1)	-1.0215E-01	A	2.4155E-01
	a(2)	5.2486E-03	a	5.3074E-01
	a(3)	-2.2801E-04	b	1.4532E-01
			c	-6.5841E-03
	Sw	4.4806E-02	Sh	2.3126E-01
4.2-in. Round	a(0)	1.2816E+01	Zo	4.2050E+00
	a(1)	-1.8904E-02	A	6.1938E-01
	a(2)	9.6025E-04	a	3.6975E-01
	a(3)	-1.2425E-05	b	4.8741E-02
			c	-4.7044E-04
	Sw	2.1051E-01	Sh	1.0091E+00
81-mm Round	a(0)	4.5046E+00	Zo	1.4810E+00
	a(1)	-1.4122E-01	A	2.2631E-01
	a(2)	8.8510E-03	a	9.2211E-01
	a(3)	-6.7576E-04	b	1.8855E-02
			c	-9.6021E-03
	Sw	1.9394E-02	Sh	1.3795E-01

TABLE 50. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 5-KNOT QUARTERING
WIND, FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0413E+01	Zo	3.3348E+00
	a(1)	6.4688E-02	A	3.4351E-01
	a(2)	4.8588E-03	a	5.6547E-01
	a(3)	-1.7646E-04	b	6.9918E-02
			c	-2.0005E-03
	Sw	3.0709E-01	Sh	5.8625E-01
105-mm Round	a(0)	6.1002E+00	Zo	2.0076E+00
	a(1)	2.8827E-02	A	2.6891E-01
	a(2)	6.2798E-03	a	1.0561E+00
	a(3)	-8.3365E-04	b	-7.5069E-02
			c	-3.1777E-03
	Sw	5.2048E-02	Sh	2.5628E-01
4.2-in. Round	a(0)	1.3175E+01	Zo	4.2050E+00
	a(1)	9.8523E-02	A	4.6761E-01
	a(2)	2.9066E-03	a	3.4369E-01
	a(3)	-7.6261E-05	b	8.2821E-02
			c	-1.2950E-03
	Sw	4.7606E-01	Sh	8.2638E-01
81-mm Round	a(0)	4.5367E+00	Zo	1.4810E+00
	a(1)	-4.1436E-02	A	4.5156E-01
	a(2)	1.4438E-02	a	1.5562E+00
	a(3)	-2.5855E-03	b	-6.2057E-01
			c	2.6318E-02
	Sw	3.5100E-02	Sh	3.2297E-01

TABLE 51. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 5-KNOT CROSS WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0387E+01	Zo	3.3348E+00
	a(1)	2.4184E-01	A	3.0064E-01
	a(2)	1.1762E-03	a	6.3694E-01
	a(3)	-2.4004E-04	b	6.7176E-02
			c	-2.6622E-03
	Sw	2.0731E-01	Sh	4.2173E-01
105-mm Round	a(0)	6.1436E+00	Zo	2.0076E+00
	a(1)	1.4503E-01	A	3.4800E-01
	a(2)	5.2304E-03	a	1.4056E+00
	a(3)	-1.5281E-03	b	-3.4160E-01
			c	7.9904E-03
	Sw	7.3763E-02	Sh	3.9993E-01
4.2-in. Round	a(0)	1.3196E+01	Zo	4.2050E+00
	a(1)	2.6801E-01	A	3.8826E-01
	a(2)	8.4668E-04	a	4.6910E-01
	a(3)	-1.0930E-04	b	7.4037E-02
			c	-1.5363E-03
	Sw	3.5377E-01	Sh	5.8070E-01
81-mm Round	a(0)	4.5431E+00	Zo	1.4810E+00
	a(1)	8.7421E-02	A	6.4250E-01
	a(2)	7.1214E-03	a	1.7695E+00
	a(3)	-4.1255E-03	b	-1.0529E+00
			c	6.6642E-02
	Sw	3.5174E-02	Sh	3.9662E-01

TABLE 52. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 10-KNOT HEAD WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0164E+01	Zo	3.3348E+00
	a(1)	-8.0847E-02	A	5.7692E-01
	a(2)	6.5796E-03	a	5.4458E-01
	a(3)	-2.4373E-04	b	1.0703E-01
			c	-3.5998E-03
	Sw	1.2989E-01	Sh	5.8208E-01
105-mm Round	a(0)	6.0682E+00	Zo	2.0076E+00
	a(1)	-2.0431E-01	A	3.5981E-01
	a(2)	2.0995E-02	a	6.7309E-01
	a(3)	-1.8241E-03	b	2.3017E-01
			c	-2.4025E-02
	Sw	4.4806E-02	Sh	2.3887E-01
4.2-in. Round	a(0)	1.2771E+01	Zo	4.2050E+00
	a(1)	-2.6193E-02	A	7.3271E-01
	a(2)	3.2476E-03	a	4.2838E-01
	a(3)	-9.1595E-05	b	9.3833E-02
			c	-1.8768E-03
	Sw	1.6648-01	Sh	1.0229E+00
81-mm Round	a(0)	4.4889E+00	Zo	1.4810E+00
	a(1)	-2.5301E-01	A	3.6286E-01
	a(2)	2.4642E-02	a	8.8386E-01
	a(3)	-4.3930E-03	b	1.6374E-01
			c	-5.2949E-02
	Sw	8.2340E-03	Sh	8.0289E-02

TABLE 53. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 10-KNOT QUARTERING WIND, FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0283E+01	Zo	3.3348E+00
	a(1)	2.0927E-01	A	4.7345E-01
	a(2)	9.8682E-03	a	6.5011E-01
	a(3)	-1.1168E-03	b	1.3114E-01
			c	-8.1245E-03
	Sw	1.7002E-01	Sh	4.1901E-01
105-mm Round	a(0)	6.1002E+00	Zo	2.0076E+00
	a(1)	5.7654E-02	A	5.4641E-01
	a(2)	2.5119E-02	a	1.1065E+00
	a(3)	-6.6692E-03	b	-1.6042E-01
			c	-1.2698E-02
	Sw	5.2048E-02	Sh	2.5420E-01
4.2-in. Round	a(0)	1.3175E+01	Zo	4.2050E+00
	a(1)	1.9705E-01	A	5.5601E-01
	a(2)	1.1626E-02	a	4.5224E-01
	a(3)	-6.1009E-04	b	1.4612E-01
			c	-4.8761E-03
	Sw	4.7606E-01	Sh	8.3406E-01
81-mm Round	a(0)	4.5367E+00	Zo	1.4810E+00
	a(1)	-8.2872E-02	A	1.0470E+00
	a(2)	5.7751E-02	a	1.4438E+00
	a(3)	-2.0684E-02	b	-1.0477E+00
			c	8.3525E-02
	Sw	3.5100E-02	Sh	3.1532E-01

TABLE 54. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 10-KNOT CROSS WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0137E+01	Zo	3.3348E+00
	a(1)	4.8369E-01	A	4.5822E-01
	a(2)	4.7049E-03	a	7.7553E-01
	a(3)	-1.9204E-03	b	9.2916E-02
			c	-9.5249E-03
	Sw	2.0731E-01	Sh	4.3041E-01
105-mm Round	a(0)	6.0854E+00	Zo	2.0076E+00
	a(1)	3.9972E-01	A	5.3973E-01
	a(2)	-1.9179E-02	a	1.1352E+00
	a(3)	-8.4490E-03	b	-2.2212E-01
			c	-1.8912E-02
	Sw	3.3601E-02	Sh	1.6633E-01
4.2-in. Round	a(0)	1.3082E+01	Zo	4.2050E+00
	a(1)	5.9258E-01	A	4.8330E-01
	a(2)	-2.0916E-03	a	4.7646E-01
	a(3)	-7.3777E-04	b	1.7052E-01
			c	-7.0708E-03
	Sw	2.5814E-01	Sh	5.2559E-01
81-mm Round	a(0)	4.5431E+00	Zo	1.4810E+00
	a(1)	1.7484E-01	A	1.5036E+00
	a(2)	2.8486E-02	a	1.5830E+00
	a(3)	-3.3004E-02	b	-1.7626E+00
			c	2.2163E-01
	Sw	3.5174E-02	Sh	3.8545E-01

TABLE 55. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 15-NKOT HEAD WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0164E+01	Zo	3.3348E+00
	a(1)	-1.2127E-01	A	7.0388E-01
	a(2)	1.4804E-02	a	5.8705E-01
	a(3)	-8.2259E-04	b	1.5131E-01
			c	-7.9081E-03
	Sw	1.2989E-01	Sh	5.8709E-01
105-mm Round	a(0)	6.0682E+00	Zo	2.0076E+00
	a(1)	-3.0646E-01	A	4.7322E-01
	a(2)	4.7238E-02	a	7.0383E-01
	a(3)	-6.1564E-03	b	3.3290E-01
			c	-5.3538E-02
	Sw	4.4806E-02	Sh	2.4017E-01
4.2-in. Round	a(0)	1.2739E+01	Zo	4.2050E+00
	a(1)	-2.6385E-02	A	8.6099E-01
	a(2)	6.3100E-03	a	6.1385E-01
	a(3)	-2.8929E-04	b	8.8626E-02
			c	-3.1183E-03
	Sw	1.3730E-01	Sh	7.4361E-01
81-mm Round	a(0)	4.4821E+00	Zo	1.4810E+00
	a(1)	-3.5891E-01	A	6.3608E-01
	a(2)	4.3424E-02	a	9.7799E-01
	a(3)	-1.3019E-02	b	-1.9509E-02
			c	-6.8466E-02
	Sw	3.6647E-03	Sh	4.4454E-02

TABLE 56. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 15-KNOT QUARTERING WIND, FAR IR BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.0413E+01	Zo	3.3348E+00
	a(1)	1.9406E-01	A	6.4031E-01
	a(2)	4.3729E-02	a	7.3636E-01
	a(3)	-4.7645E-03	b	1.4897E-01
			c	-1.6005E-02
	Sw	3.0709E-01	Sh	5.9737E-01
105-mm Round	a(0)	6.0443E+00	Zo	2.0076E+00
	a(1)	2.2276E-01	A	5.5459E-01
	a(2)	-8.0089E-03	a	8.9376E-01
	a(3)	-1.4638E-02	b	1.7936E-01
			c	-8.4028E-02
	Sw	1.4378E-02	Sh	7.6330E-02
4.2-in. Round	a(0)	1.3015E+01	Zo	4.2050E+00
	a(1)	3.9441E-01	A	6.7094E-01
	a(2)	1.4278E-02	a	5.3797E-01
	a(3)	-1.6913E-03	b	1.8797E-01
			c	-9.9867E-03
	Sw	2.8678E-01	Sh	6.6070E-01
81-mm Round	a(0)	4.5367E+00	Zo	1.4810E+00
	a(1)	-1.2431E-01	A	1.4780E+00
	a(2)	1.2994E-01	a	1.3287E+00
	a(3)	-6.9808E-02	b	-1.3241E+00
			c	1.4821E-01
	Sw	3.5100E-02	Sh	3.1038E-01

TABLE 57. COEFFICIENTS FOR NEUTRAL METEOROLOGY, 15-KNOT CROSS WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.0387E+01	Zo	3.3348E+00
	a(1)	7.2553E-01	A	6.1891E-01
	a(2)	1.0586E-02	a	8.0258E-01
	a(3)	-6.4812E-03	b	1.3324E-01
			c	-2.1296E-02
	Sw	2.0731E-01	Sh	4.3044E-01
105-mm Round	a(0)	6.0588E+00	Zo	2.0076E+00
	a(1)	6.7950E-01	A	3.8984E-01
	a(2)	-8.9889E-02	a	7.9663E-01
	a(3)	-2.1480E-02	b	5.7222E-01
			c	-2.0270E-01
	Sw	1.8007E-02	Sh	9.4566E-02
4.2-in. Round	a(0)	1.3196E+01	Zo	4.2050E+00
	a(1)	8.0404E-01	A	6.3602E-01
	a(2)	7.6202E-03	a	6.4285E-01
	a(3)	-2.9510E-03	b	1.6952E-01
			c	-1.2392E-02
	Sw	3.5377E-01	Sh	5.9546E-01
81-mm Round	a(0)	4.5053E+00	Zo	1.4810E+00
	a(1)	4.4674E-01	A	8.9893E-01
	a(2)	-1.1085E-01	a	1.1715E+00
	a(3)	-6.8655E-02	b	-7.7331E-01
			c	-7.4697E-02
	Sw	1.1340E-02	Sh	9.0133E-02

TABLE 58. COEFFICIENTS FOR INVERSION METEOROLOGY, 5-KNOT HEAD WIND,
FAR IR BAND

MUNITION	HALF-WIDTH		HEIGHT	
155-mm Round	a(0)	1.4996E+01	Zo	4.9064E+00
	a(1)	6.3275E-03	A	8.4784E-01
	a(2)	1.1969E-04	a	3.0719E-01
	a(3)	-7.8351E-07	b	1.7599E-02
			c	-6.6986E-05
	Sw	3.9350E-01	Sh	1.4261E+00
105-mm Round	a(0)	9.0844E+00	Zo	2.9962E+00
	a(1)	-2.6735E-02	A	4.6213E-01
	a(2)	7.3788E-04	a	3.6873E-01
	a(3)	-1.0051E-05	b	4.2014E-02
			c	-5.0214E-04
	Sw	1.3535E-01	Sh	5.0729E-01
4.2-in. Round	a(0)	1.4745E+01	Zo	4.8860E+00
	a(1)	7.2093E-03	A	8.2834E-01
	a(2)	1.1232E-04	a	3.1046E-01
	a(3)	-8.0710E-07	b	1.7933E-02
			c	-7.0527E-05
	Sw	3.4062E-01	Sh	1.3366E+00
81-mm Round	a(0)	6.8592E+00	Zo	2.2544E+00
	a(1)	-6.0448E-02	A	3.0724E-01
	a(2)	2.0554E-03	a	5.8140E-01
	a(3)	-4.4385E-05	b	3.6988E-02
			c	-1.1748E-03
	Sw	8.6915E-02	Sh	3.7273E-01

TABLE 59. COEFFICIENTS FOR INVERSION METEOROLOGY, 5-KNOT QUARTERING
WIND, FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.5512E+01	Zo	4.9064E+00
	a(1)	1.7034E-01	A	4.8622E-01
	a(2)	7.0270E-04	a	3.9897E-01
	a(3)	-1.6676E-05	b	3.1285E-02
			c	-3.0813E-04
	Sw	6.4769E-01	Sh	8.2926E-01
105-mm Round	a(0)	9.2817E+00	Zo	2.9962E+00
	a(1)	1.0759E-01	A	2.7526E-01
	a(2)	2.6040E-03	a	7.3509E-01
	a(3)	-1.1749E-04	b	1.1770E-02
			c	-1.0612E-03
	Sw	2.1547E-01	Sh	5.0403E-01
4.2-in. Round	a(0)	1.5226E+01	Zo	4.8860E+00
	a(1)	1.7450E-01	A	4.7424E-01
	a(2)	6.0804E-04	a	4.0457E-01
	a(3)	-1.6926E-05	b	3.1639E-02
			c	-3.2261E-04
	Sw	5.7132E-01	Sh	7.8428E-01
81-mm Round	a(0)	6.9527E+00	Zo	2.2544E+00
	a(1)	6.2646E-02	A	2.5704E-01
	a(2)	4.9997E-03	a	1.1291E+00
	a(3)	-3.5160E-04	b	-1.1256E-01
			c	2.2964E-04
	Sw	1.1086E-01	Sh	4.3508E-01

TABLE 60. COEFFICIENTS FOR INVERSION METEOROLOGY, 5-KNOT CROSS WIND,
FAR IR BAND

MUNITION		HALF-WIDTH		HEIGHT
155-mm Round	a(0)	1.5936E+01	Zo	4.9064E+00
	a(1)	3.0541E-01	A	3.8500E-01
	a(2)	4.3365E-04	a	4.8264E-01
	a(3)	-3.2911E-05	b	2.9873E-02
			c	-4.2686E-04
	Sw	8.0756E-01	Sh	8.5493E-01
105-mm Round	a(0)	9.5065E+00	Zo	2.9962E+00
	a(1)	2.0678E-01	A	2.4547E-01
	a(2)	4.1761E-03	a	1.0863E+00
	a(3)	-2.6402E-04	b	-8.3150E-02
			c	2.2737E-04
	Sw	3.7541E-01	Sh	7.2585E-01
4.2-in. Round	a(0)	1.5679E+01	Zo	4.8860E+00
	a(1)	3.0460E-01	A	3.6598E-01
	a(2)	4.3769E-04	a	5.3493E-01
	a(3)	-3.4638E-05	b	2.3411E-02
			c	-3.8381E-04
	Sw	7.7721E-01	Sh	8.8199E-01
81-mm Round	a(0)	7.0124E+00	Zo	2.2544E+00
	a(1)	1.9202E-01	A	2.9098E-01
	a(2)	3.6364E-03	a	1.4668E+00
	a(3)	-6.5597E-04	b	-3.0251E-01
			c	5.8930E-03
	Sw	1.3098E-01	Sh	5.7273E-01

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